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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,206	03/11/2004	Jeremy Mercer	003797.00768	6163
28319 7590 02/28/2008 BANNER & WITCOFF, LTD. ATTORNEYS FOR CLIENT NOS. 003797 & 013797 1100 13th STREET, N.W. SUITE 1200 WASHINGTON, DC 20005-4051			EXAMINER XU, KEVIN K	
			ART UNIT 2628	PAPER NUMBER
			MAIL DATE 02/28/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/798,206

Applicant(s)

MERCER, JEREMY

Examiner

Kevin K. Xu

Art Unit

2628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 8-13, 19, 20 and 22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/31/07 has been entered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 8-13, 19-20, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sprenger. ("H-BLOB: A Hierarchical Visual Clustering Method Using Implicit Surfaces")

Regarding claim 1, Sprenger teaches using shapes to visually represent design elements on a visual design surface, wherein the design elements are entities of a process or system being designed by a user and the design elements include a first design element and a second design element. (p. 3 Section 2.2, p. 3-p.4 Section 2.3) It should be noted that Sprenger teaches a plurality of objects (design elements), which may take the shape of a dot, icon, glyph, etc. Furthermore Sprenger teaches defining

characteristics for the design elements such that each of the design elements is associated with one of the characteristics, wherein the characteristic associated with the first design element is different than the characteristic associated with the second design element and associating the characteristics with auras, respectively, each of the auras being a visually perceptible element on the visual design surface that is distinguishable from the other auras, wherein different ones of the characteristics are associated with different auras. (p. 4 Section 3.1-p. 7 Section 4.2) It should be noted that Sprenger teaches objects may be clustered into blobs (auras) based on distance between their centroids. For example, in Fig. 7, level 2 objects A and BC form a cluster sharing the similar attribute of distance. Furthermore Sprenger teaches displaying for each design element on the visual design surface with the aura associated with the characteristic associated with that design element, wherein the shapes of the first and second design elements are displayed with different auras. (p. 4 Section 3.1-p. 7 Section 4.2, Fig. 12-13) While Sprenger does teach shapes in proximity to each other (sharing a particular characteristic) may be clustered in an aura and subsequently auras may be clustered into affinity regions (larger auras sharing similar characteristic), Sprenger does not explicitly teach automatically moving the shapes of design elements sharing a particular one of the characteristics into an affinity region for the particular characteristic, such that the moved shapes are located in proximity to each other on the visual design surface. Nonetheless it should be noted that Sprenger also teaches an application of the clustering process may be utilized for document retrieval visualization and thus, ~~if a user were to~~ edit a location of a document (object)

and re-run the cluster visualization, the object could then be automatically moved from one affinity region to another based on editing of the object (document) by the user. Examiner takes official notice that it is well known in the art for users to edit documents. It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow users to edit documents (objects) into the system of Sprenger because providing the functionality of correcting or modifying data for the user to enhance overall accuracy of the visual presentation can be realized.

Claim 19 is similar in scope to claim 1 except for the recitation of a computer readable medium containing computer executable instructions for performing the steps of claim 1. Examiner takes official notice that a computer readable medium containing computer executable instructions is often times utilized for developing multidimensional data visualization. It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow users to utilize computer storing computer executable instructions into the system of Sprenger because providing the capability of performing complex computational tasks at high-speed can be realized.

Regarding claim 20, Sprenger teaches displaying the aura around the design element shape. (p. 3 Section 2.2, p. 3-p.4 Section 2.3, Figs. 1-7)

Regarding claims 2 and 3, Sprenger teaches wherein the aura comprises a color coded area surrounding the shape and wherein the aura comprises a color coded area adjacent to at least a portion of the shape. (p. 3 Section 2.2, p. 3-p.4 Section 2.3, Figs. 1-7)

Regarding claim 4, Sprenger teaches merging the auras with the shapes of design elements in the affinity region for the particular characteristic. (p. 4 Section 3.1 Fig. 7)

Regarding claim 8, Sprenger teaches characteristics defined include a use for the design element. (p. 4 Section 3.1-p. 7 Section 4.2, Fig. 12-13) It should be noted the objects as taught by Sprenger may be a hit list from an intranet document query and thus, the characteristic for clustering are in regards to the proximity of one document in the hit list to another document in the hit list.

Regarding claims 11 and 22, Sprenger teaches characteristics include identification of an importance level (comprises one of a particular importance level for the corresponding design element). It should be noted that Sprenger teaches merging clusters based on minimum distance between pairs of objects belonging to different clusters. Thus, the merging signifies a characteristic of "importance" between the pairs of objects for each level. (Fig. 7)

Regarding claims 12 and 13, Sprenger teaches associating a particular design element with first and second characteristics and displaying the shape for the particular design element on the visual design surface with the auras associated with the first and second characteristics respectively. (p. 4 Section 3.1-p. 7 Section 4.2, Fig. 12-13) Furthermore Sprenger teaches associating the particular design element with a third characteristic and determining the shape for a particular design element on the visual design surface with the aura associated with the third characteristic. (p. 4 Section 3.1-p. 7 Section 4.2, Fig. 12-13) For example, object in aura B may be associated with objects

in auras C (level 1) and A (level II) and also associated with objects in the DE aura (level III). An example of this type of multiple association of a particular object is seen in Fig. 13 for 5 or 10 or 20 clusters.

Regarding claim 9, Sprenger does not explicitly teach characteristics defined include identification of a namespace. Nonetheless Sprenger teaches an application of document retrieval visualization identifying the clustering of documents. Examiner takes official notice that namespaces are abstract containers or environments created to hold a logical grouping of unique identifiers. It would be obvious to one of ordinary skill in the art at the time the invention was made to cluster objects by namespace into the system of Sprenger because namespaces provide a mechanism for grouping logically related identifiers, thus allowing the user to visually distinguish the modularity of the system.

Regarding claim 10, Sprenger does not explicitly teach characteristics defined include identification of an application layer. Nonetheless Sprenger teaches an application of document retrieval visualization identifying the clustering of documents. Examiner takes official notice that application layers provide services for an application program to ensure that effective communication with another application program in a network is possible. It would be obvious to one of ordinary skill in the art at the time the invention was made to cluster objects by application layer because the user can better visualize high-level set-up services for a particular application program.

Allowable Subject Matter

Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

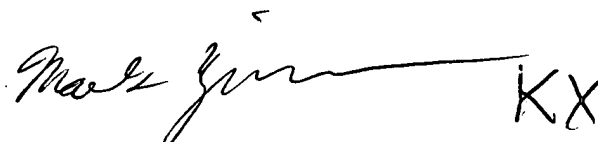
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin K. Xu whose telephone number is 571-272-7747. The examiner can normally be reached on 8:30AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Zimmerman can be reached on 571-272-7653. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kevin Xu

2/23/08



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